

REMARKS

Claims 1 - 12 and 17 - 24 are pending in the application. Claims 13 - 16 were previously withdrawn subject to a restriction requirement. Claims 1 - 12 and 17 - 24 stand rejected. Note, Claim 17 is still pending despite the first page of the Office Action that indicates otherwise. Claims 1, 17, and 24 are amended and Claims 11, 19, and 23 are cancelled herein. All rejections are addressed below.

Claim Rejections Under 35 USC 112, First Paragraph

Claims 1 - 12 stand rejected under 35 USC 112, first paragraph. More particularly, the use of the term “non-foam” is rejected as not being literally supported in the specification. The term “non-term” has been removed from Claim 1. Therefore, the rejections with respect to Claim 1 and dependent Claims 2 - 12 have been overcome.

Rejections Under 35 USC 102(b) in view of Gleim ‘671

Claims 17, 18, 20, 22, and 24 stand rejected under 35 USC 102(b) as anticipated by Gleim ‘671. Claim 17 has been amended to recite a substrate layer consisting essentially of a woven fiber material. The structural layer (substrate layer 34) disclosed in Gleim does not contain a woven fiber material as recited in Claim 17. Rather, the structural layer of Gleim is simply a layer of thermoplastic material (col. 5, lines 50-52). Claims 18, 20, 22, and 24 each depend from Claim 17 and implicitly contain the same recitations as the base claim. Therefore, it is submitted that the 35 USC 102(b) rejection has been overcome with respect to Claims 17, 18, 20, 22, and 24.

Rejections Under 35 USC 103 in view of Gleim '671 and Hirosaki '050

Claims 1 - 12, 19, 21, and 23 stand rejected under 35 USC 103 in view of Gleim '671 combined with Hirosaki '050.

Gleim '671 does not disclose the use of a substrate layer having any type of woven fiber material. Hirosaki discloses the use of a prepreg 23, which is a combination of a phenol resin 22 and a weave base material 21, but does not disclose the use of a woven fabric layer without a resin matrix surrounding the fabric (see [0015-0016]). Therefore, the references, considered alone or in combination, do not disclose the use of a woven fabric substrate that is not employed within a resin.

As shown in the specification, page 9, lines 6-7, the preferred substrate of the invention is one in which the woven material is not bound within a resin matrix, contrary to the prepreg taught by Hirosaki. The transitional phrase "consisting essentially of" has been added to Claims 1 and 17 to further distinguish the woven fiber material of the invention from the prepreg (resin/fabric combination) of Hirosaki. In this regard, the substrate layer of Claims 1 and 17 are now defined to not only include a substrate of woven fiber material, but to exclude other constituents such as a resin matrix of the Hirosaki prepreg, that would materially affect the basic and novel characteristics of the material. This recitation carries through to Claims 2 - 12, 19, 21, and 23 by dependency.

Claim 11 has been canceled and Claim 21 has been amended to better correspond to amended Claims 1 and 17, respectively. Claim 24 has been amended to depend from Claim 20 rather than amended Claim 17.

Because the references, even when combined, do not teach all elements of the claimed invention, it is submitted that Claims 1 - 10, 12, 19, 21, and 23 are patentably distinct from Gleim in view of Hirosaki.

Conclusion

In view of the Claims that have been amended and the above remarks, all rejections have been addressed and overcome. It is respectfully submitted that the Claims are in condition for allowance, and allowance of the Claims is requested.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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